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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,545	11/05/2003	Niranjan Behera	1263-0022US	8302
32375	7590	08/03/2005	EXAMINER	
SHREEN K. DANAMRAJ DANAMRAJ & YOUST, P.C. PREMIER PLACE, STE. 1450 DALLAS, TX 75206			NGHIEM, MICHAEL P	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b> 10/701,545	<b>Applicant(s)</b> BEHERA ET AL.	
	<b>Examiner</b> Michael P. Nghiem	<b>Art Unit</b> 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-47 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-11, 16-19 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 7, 12-15 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

The Amendment filed on July 5, 2005 has been acknowledged.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8-11, 16-19, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang (US 6,691,264).

Regarding claims 1 and 16, Huang discloses a method and apparatus (Fig. 3) for testing a memory instance (30), comprising:

- scanning test information into a test and repair wrapper (42) integrated with said memory instance (Abstract, lines 1-3);
- providing a strobe control signal (BISR Control, Fig. 5) to said test and repair wrapper for signaling commencement of testing operations with respect to said memory instance (Fig. 5);

- generating, by said test and repair wrapper, at least one of an address signal, a data signal and a command signal based on said scanned test information (address and control signals from 42, Fig. 3);

- executing at least one test with respect to said memory instance responsive to said address, data and command signals generated in said test and repair wrapper (Fig. 3).

Regarding claim 2, Huang discloses that said step of scanning test information is effectuated by a built-in self-test and repair (BISTR) processor (48) associated with said memory instance (Fig. 3).

Regarding claim 3, Huang discloses that said strobe control signal is provided to said test and repair wrapper by a built-in self-test and repair (BISTR) processor associated with said memory instance (Figs. 3, 5).

Regarding claims 4 and 17, Huang discloses that said at least one test is executed at speed using a memory clock operable with said memory instance (column 5, lines 47-49, Fig. 1a, column 7, lines 60-62).

Regarding claims 5 and 18, Huang discloses that said at least one test comprises a cycle write operation (test of one cell, column 5, lines 56-58).

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Regarding claims 6 and 19, Huang discloses that said at least one test comprises a single cycle read operation (test of one cell, column 5, lines 56-58).

Regarding claims 8 and 21, Huang discloses that said at least one test comprises a back-to-back write operation (column 5, lines 58-59).

Regarding claims 9 and 22, Huang discloses that said back-to-back write operation is followed by a read operation (column 5, lines 58-60).

Regarding claims 10 and 23, Huang discloses that said at least one test comprises a back-to-back read operation (column 5, lines 59-60).

Regarding claims 11 and 24, Huang discloses that said back-to-back read operation is followed by a write operation (column 5, lines 63-66).

***Allowable Subject Matter***

Claims 7, 12-15, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 25-47 are allowed.

### ***Reasons For Allowance***

The method as claimed wherein said at least one test comprises a pair of read and write operations within a test clock cycle that is two memory cycles long (claims 7, 20) said test and repair wrapper is generated by a memory compiler used for compiling said memory instance (claims 12, 34, 41) or a code portion for generating a test and repair wrapper operable to be integrated with said at least one STAR memory instance (claim 25) is not disclosed, suggested, or made obvious by the prior art of record.

### ***Response to Arguments***

Applicant's arguments filed on July 5, 2005 have been fully considered but they are not persuasive.

With respect to the 35 USC 102 rejections, Applicants argue that there is no scanning of test information into the BISR wrapper (42) of the Huang reference.

Examiner's position is that there is scanning (reading of data into 42, Fig. 3) of test information (data from BIST's, Fig. 3) into the BISR wrapper (42) of the Huang reference.

Applicants further argue that the BISR wrapper (42) does not generate address signals, data signals, and command signals based on the scanned in test information.

Examiner's position is that claims 1 and 16 recite generating at least one of an address, data, and command signal. Huang discloses generating a command signal (control signals 44, 54). Thus, Huang discloses generating at least one of an address, data, and command signal.

Applicants further argue that the BISR wrapper (42) does not perform the tests, rather only self-repair.

Examiner's position is that the "executing at least one test" (claims 1, 16) is not recited in the claims to be performed by the test and repair wrapper. It is noted that the wrapper (42) is part of a system and method for integrating built-in self-test (BIST) and built-in self-repair (BISR) (Abstract, lines 1-3).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

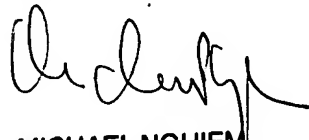
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-H.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8000.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MICHAEL NGHIEM  
PRIMARY EXAMINER

Michael Nghiem

August 1, 2005